Silicon NPN Power Transistors BU205

DESCRIPTION

- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- For use in horizontal deflection output stages for color TV receives.

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
I_C	Collector current		2.5	A
I_{CM}	Collector current-peak		3	A
I_B	Base current		0.1	A
I_{BM}	Base current-peak		1.5	A
P_T	Total power dissipation	T_C=25℃	10	W
T_j	Junction temperature		115	℃
T_{stg}	Storage temperature		-65~115	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance junction to case	2.5	K/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.1A; I_B=0;L=25mH	700			V
$V_{(BR)EBO}$	Emitter-base breakdown votage	I_E=10mA; I_C=0	5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=2 A;I_B=1A			5.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=2 A;I_B=1A			1.5	V
I_{CES}	Collector cut-off current	V_{CE}=1500V;V_{BE}=0			1.0	mA
h_{FE}	DC current gain	I_C=2A ; V_{CE}=5V	2			
C_{OB}	Output capacitance	I_E=0; V_{CB}=10V;f=1MHz		65		pF
f_T	Transition frequency	I_C=0.1A ; V_{CE}=15V		7.5		MHz
t_f	Fall time	I_C=2A ;I_B=1A L_B=10μH		0.75		μs

PACKAGE OUTLINE

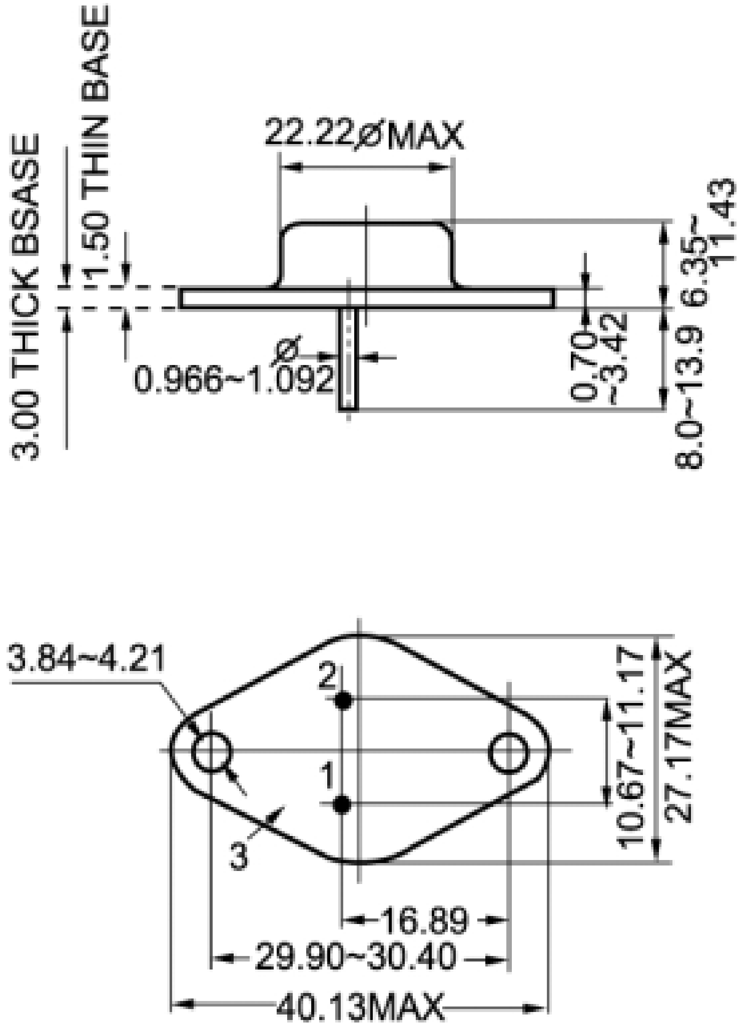

Fig.2 Outline dimensions